

Abstract

A method for removing conjugated olefins from a composition comprising contacting the composition with a Diels-Alder dienophile to convert conjugated olefins to a Diels-Alder adduct and arresting the Diels-Alder adduct. A method comprising confining a Diels-Alder dienophile to a first side of a selectively permeable barrier wherein the barrier is more permeable to conjugated olefins and less permeable to Diels-Alder dienophile and Diels-Alder adduct, and contacting a composition comprising mono-olefins and conjugated olefins with the Diels-Alder dienophile to form Diels-Alder adduct, wherein the contacting reduces the concentration of conjugated olefins in the composition. A method for removing conjugated olefins from a composition comprising bubbling the composition through a liquid comprising Diels-Alder dienophile to form a liquid comprising Diels-Alder adduct. A method for removing conjugated olefins from a non-solid composition comprising contacting the composition with a solid comprising Diels-Alder dienophile to form a solid comprising Diels-Alder adduct.